AMENDMENTS TO THE CLAIMS

1-6. (Canceled)

7. (Currently Amended) The method of Claim 32 [[1]], wherein said [[gas]] pressure source is an air source.

8. (Currently Amended) The method of Claim 31 [[1]], wherein said junction is configured as a "T" junction.

9. (Currently Amended) The method of Claim 31 [[1]], wherein said junction is configured as a "Y" junction.

10. (Currently Amended) The method of Claim 31 [[1]], wherein [[said]] said meltable material is selected from a group consisting of solder, plastic, polymer, electrorheological fluid and wax.

11. (Currently Amended) The method of Claim 32 [[1]], wherein after said melted material moves to said junction ~~in step (e)~~, said melted plug ~~material~~ is allowed to cool.

12-28. (Canceled)

29. (Currently Amended) The method of Claim 35 [[15]], wherein said substrate is selected from the group consisting of glass and silicon.

30. (Currently Amended) A device, comprising[[:]] an inlet port in fluidic communication with a first microchannel, said first microchannel having a middle section and an end section, said end section intersecting a second microchannel at a junction, wherein a first heater element is associated with said inlet port, a second heater element is associated with said middle section of first microchannel, and a third heater element is associated with said second microchannel at said junction, and wherein said inlet port is linked to ~~an air~~ pressure source and a vacuum source.

31. (New) A method, comprising:

a) providing, a device, comprising,

i) a meltable material;

ii) an inlet port linked to a gas source, wherein said inlet port is associated with a first heater element;

iii) a stem microchannel comprising a second heater element, wherein said stem microchannel is in fluidic communication with said inlet port;

iv) a main microchannel intersecting said stem microchannel, said main microchannel comprising a third heater element, wherein said intersecting forms a junction.

b) firing at least two of said heater elements under conditions such that said meltable material at least partially melts to create a melted plug;

c) applying pressure with said gas source under conditions such that said melted plug is moved.

32. (New) The method of Claim 31, wherein said firing of at least two of said heater elements comprise said first and second heater elements and said applying pressure of said gas source comprises generating a positive pressure, thereby moving said melted plug into said junction.

33. (New) The method of Claim 31, wherein said firing of at least two of said heater elements comprise said second and third heater elements.

34. (New) The method of Claim 31, wherein said applying of said gas source comprises a vacuum source, thereby retracting said melted plug out of said junction

35. (New) The method of Claim 31, further comprising before step b), firing said first heater element to load said meltable material into said stem microchannel through said inlet port.

36. (New) The method of Claim 31, wherein said stem microchannel and said main microchannel are disposed in a substrate.